


**CURRICULUM VITAE****BIOGRAPHICAL**

NAME:	<b>Barbara A. Gaines, MD</b>	BIRTH DATE:	November 3, 1964
HOME ADDRESS:	1236 Malvern Avenue RI Pittsburgh, PA 15217	BIRTH PLACE:	Providence,
HOME PHONE:	(412) 622-0110	CITIZENSHIP:	USA
BUSINESS ADDRESS:	Children's Hospital of Pittsburgh Department of Pediatric Surgery 3705 Fifth Avenue Pittsburgh, PA 15213	SOCIAL SECURITY #:	
BUSINESS PHONE:	(412) 692-8288	SPOUSE:	Richard D. King, Jr., Ph.D.
FAX:	(412) 692-6069	CHILDREN:	Liliana Jean King Robert Duckett King Thomson Jacob King
E-MAIL:	Barbara.Gaines@chp.edu		

**EDUCATION and TRAINING**UNDERGRADUATE:

1986	Brown University Providence, RI	BA Magna Cum Laude	History and Biology
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GRADUATE:

1990	University of Virginia Charlottesville, VA	MD	Medicine
2002	University of Pittsburgh, School of Medicine Pittsburgh, PA	Certificate	Clinical Research
<u>POST GRADUATE:</u>			
1990-1991	Vanderbilt University Nashville, TN	Intern, General Surgery	Lester Williams, MD
1991-1993	Vanderbilt University Nashville, TN	Resident, General Surgery	Lester Williams, MD
1992-1995	University of Pittsburgh School of Medicine Department of Surgery Pittsburgh, PA	Research Fellow Cellular Therapeutics	Suzanne Ildstad, MD

1995-1997	Vanderbilt University Nashville, TN	Resident, General Surgery	John Tarpley, MD
1997-1998	Vanderbilt University Nashville, TN	Resident, Trauma & Critical Care	John A. Morris, Jr., MD
1998-1999	Children's Hospital of Pittsburgh Pittsburgh, PA	1 <sup>st</sup> Year Resident, Pediatric Surgery	Eugene Wiener, MD
1999-2000	Children's Hospital of Pittsburgh Pittsburgh, PA	Chief Resident, Pediatric Surgery	Eugene Wiener, MD

### APPOINTMENTS and POSITIONS

2006-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Surgical Director, Pediatric Intensive Care Unit
2004-present	Children's Hospital of Pittsburgh Division of Pediatric Surgery Pittsburgh, PA	Director, Benedum Pediatric Trauma Program
2004-present	University of Pittsburgh and Hospitals of the University Health Center of Pittsburgh Pittsburgh, PA	Program Director, Pediatric Surgical Critical Care Residency (ACGME approved 6/2004)
2004-present	<i>Pediatrics</i> , American Academy of Pediatrics	<i>Ad hoc</i> reviewer
2004-present	University of Pittsburgh School of Medicine Pittsburgh, PA	Candidate Interviewer
2001-present	University of Pittsburgh/ Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Institutional Review Board (IRB); Human Rights Committee (HRC)
2000-present	University of Pittsburgh School of Medicine Department of Surgery (Pediatric) Children's Hospital of Pittsburgh Pittsburgh, PA	Assistant Professor
2000-present	Children's Hospital of Pittsburgh	Attending Surgeon

	Division of Pediatric Surgery Pittsburgh, PA	
2000-present	Children's Hospital of Pittsburgh Division of Pediatric Surgery Pittsburgh, PA	Director, General Surgery Resident Education
2000-2006	Children's Hospital of Pittsburgh Pittsburgh, PA	Surgical Director, Neonatal Intensive Care Unit
<u>NON-ACADEMIC</u>		
2001-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, LSU Leadership Committee
2001-2002	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Census Committee
2001-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, ISB NICU & PICU Committee
2001-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Procedure Committee
2001-2002	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Monitoring Subgroup
2003-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Pain Committee
2003-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, New CHP Design Committee –NICU, Emergency, and Rapid Response
2005-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Clinical Outcomes Committee
2006-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Member, Pandemic Flu Preparedness Taskforce

#### **REGIONAL/NATIONAL COMMITTEES**

2001-present	American College of Surgeons Chicago, IL	Associate Member, ACS Pennsylvania Committee on Trauma
2004 – present	Association for Academic Surgery Northbrook, IL	Member, Executive Council
2002 – present	Association for Academic Surgery	Member, Education Committee
2003 – present	Southeastern Surgical Congress Atlanta, GA	Councilor, Pennsylvania
2004 –present	Surgical Infection Society	Member, Clinical Trials Committee
2005-present	Pennsylvania Trauma Systems Foundation	Member, Pediatric Standards Committee
2005-present	Hospital and Healthsystem Association of Pennsylvania	Member, Executive Committee
2005-present	Hospital and Healthsystem Association of Pennsylvania's Section of Accredited Trauma Center	Board Member
2004-present	Eastern Association for the Surgery of Trauma	Member, Membership Committee
2006-present	Eastern Association for the Surgery of Trauma	Member, Careers in Trauma Committee

#### **HOSPITAL AFFILIATIONS**

7/1/00-present	Children's Hospital of Pittsburgh Pittsburgh, PA	Active Staff
2000-present	UPMC Presbyterian Pittsburgh, PA	Active Staff
1/24/01-present	Western Pennsylvania Hospital Pittsburgh, PA	Active Staff
11/27/00-10/31/01	Forbes Regional Health Center Pittsburgh, PA	Consulting Staff

2000-present	Magee Womens Hospital Pittsburgh, PA	Consulting Staff
4/26/01-present	Mercy Hospital Pittsburgh, PA	Courtesy Staff
2001-present	Allegheny General Hospital Pittsburgh, PA	Attending Staff

### **PROFESSIONAL and SCIENTIFIC ASSOCIATIONS**

2005-present	American Association for the Surgery of Trauma
2005-present	Association for Surgical Education
2004-present	Fellow, American College of Surgeons
2004-present	Specialty Fellow, American Academy of Pediatrics
2004-present	American Pediatric Surgical Association (APSA)
2003-present	Eastern Association for the Surgery of Trauma (EAST)
2002-present	Surgical Infection Society (SIS)
2001-present	Association for Academic Surgery (AAS)
1996-present	Southeastern Surgical Congress
1992-present	Society of Critical Care Medicine (SCCM)
1989-present	Association of Women Surgeons

### **SPECIALTY CERTIFICATION**

06/10/98-07/31/08	American Board of Surgery, Specialty of Surgery	#43332
10/16/98-07/31/09	American Board of Surgery, Surgical Critical Care	#1668
3/18/02-07/31/2012	American Board of Surgery, Pediatric Surgery	#872

### **MEDICAL or OTHER PROFESSIONAL LICENSURE**

02/99-02/06	Instructor, Advanced Trauma Life Support (ATLS)
12/21/00-12/31/04	Pennsylvania Bureau of Professional and Occupational Affairs MD-050420-L
09/25/01-09/30/04	Drug Enforcement Agency BG6262997

### **HONORS**

2000, 2001, 2002, 2003, 2004	Outstanding Surgeon, Critical Care Staff, Children's Hospital of Pittsburgh
1997	Alfred E. Blalock Award, Surgical Research, Vanderbilt University
1995	Travel Award, Tolerance Symposium
1991	Young Investigator Award, American Motility Society
1990	Raven Society, University of Virginia
1989	Alpha Omega Alpha, Virginia Alpha

1986 Magna Cum Laude, Brown University  
 1986 Sigma Xi Scientific Research Society, Brown University Chapter  
 1986 Phi Beta Kappa, Rhode Island Alpha

### ABSTRACTS and PRESENTATIONS

1. **Gaines BA**, Schirmer BD. The effects of erythromycin on post-operative ileus. (Meeting Abstract). American Motility Society's 6<sup>th</sup> Biennial Meeting, Newport, RI, October 1990.
2. **Gaines BA**, Holcomb GW, III, Pietsch JB, Neblett WW, III, Morgan WM, III. Gastrointestinal manifestations of hemolytic uremic syndrome: A surgeon's dilemma. (Meeting Abstract). American Pediatric Surgical Association 24<sup>th</sup> Annual Meeting, Hilton Head, SC, May 1993.
3. Kaufman CL, Colson YL, El-Ezz AY Abou, **Gaines BA**, Ildstad ST. Functional characterization of a novel cell population which facilitates the engraftment of purified stem cells in allogeneic recipients. (Meeting Abstract). American Society of Hematology 36<sup>th</sup> Annual Meeting, Nashville, TN, December 1994.
4. Michaels MG, Kaufman CL, Huneke R, Colson YL, Pillai M, Pham S, **Gaines BA**, Greenberger J, Ildstad ST. Multilineage chimerism in non-human primates using a nonlethal conditioning approach. (Meeting Abstract). Third International Symposium on Tolerance Induction, Breckenridge, CO, January 1995.
5. Kaufman CL, Michaels MG, Colson YL, Pham S, Huneke R, Pillai MV, **Gaines BA**, Greenberger J, Ildstad ST. Human bone marrow engraftment in a sublethal primate model of bone marrow transplantation (human baboon). (Meeting Abstract). Third International Symposium on Tolerance Induction, Breckenridge, CO, January 1995.
6. **Gaines BA**, El-Ezz AY Abou, Ildstad ST. Proof for de novo development of CD8<sup>+</sup>/ TCR<sup>+</sup> T-cells in the absence of the thymus. (Meeting Abstract). Third International Symposium on Tolerance Induction, Breckenridge, CO, January 1995.
7. **Gaines BA**, Colson YL, Kaufman CL, Ildstad ST. Facilitating cells enable engraftment of purified fetal liver stem cells in allogeneic recipients. (Meeting Abstract). 21<sup>st</sup> Annual Scientific Meeting of the American Society of Transplant Surgeons, Chicago, IL, May 1995.
8. Lynch JM, Gardner MJ, **Gaines BA**. An analysis of the hemodynamic consequences of femur fractures in children. (Meeting Abstract). American Pediatric Surgical Association 26<sup>th</sup> Annual Meeting, Boca Raton, FL, May 1995.
9. **Gaines BA**, Colson YL, Kaufman CL, Ildstad ST. Mice transplanted with allogeneic fetal liver stem cells and adult facilitating cells demonstrate multilineage chimerism. (Meeting Abstract). 81<sup>st</sup> Clinical Congress of the American College of Surgeons, New Orleans, LA, October 1995.

10. **Gaines BA**, Hernanz-Schulman M, Neblett WW. Abdominal ultrasound diagnosis of acute omental torsion. (Meeting Abstract). 17<sup>th</sup> Annual Pediatric Surgical Resident's Conference, Philadelphia, PA, October 1996.
11. **Gaines BA**, Colson YL, Kaufman CL, Ildstad ST. Mice transplanted with purified allogeneic fetal liver stem cells and facilitating cells from adult donors demonstrate sustained engraftment and multilineage production. (Meeting Abstract). 17<sup>th</sup> Annual Pediatric Surgical Resident's Conference, Philadelphia, PA, October 1996.
12. **Gaines BA**, Eddy VA, Leach S. Two cases of multiple, mid-gut carcinoid: An unusual presentation of an uncommon tumor. Southeastern Surgical Congress 66<sup>th</sup> Annual Scientific Meeting, Atlanta, GA, February 1998.
13. Upperman J, Gardner M, **Gaines B**, Schall L, Ford H. Functional outcome in children with pelvic fractures. American Academy of Pediatrics Annual Meeting, October 1999.
14. **Gaines BA**, Upperman JS, Ford HR. Recurrent pulmonary hypertension in an infant with congenital diaphragmatic hernia: Is a second ECMO course indicated? The 17<sup>th</sup> Annual CNMC Symposium on ECMO & Advanced Therapies for Respiratory Failure, February 2001.
15. **Gaines BA**, Upperman JS, Ford HR. Severe primary pulmonary hypertension in a neonate with Hirschsprung's disease. The 17<sup>th</sup> Annual CNMC Symposium on ECMO & Advanced Therapies for Respiratory Failure, February 2001.
16. Hackam DJ, Reblock KK, Redlinger RM, Upperman JS, Wiener ES, **Gaines BA**, Barksdale EM. Effect of diagnostic delay on outcome after the treatment of Hirschsprung's disease. American Academy of Pediatrics, San Francisco, CA, October 2001.
17. **Gaines BA**, Shultz BL, Ford HR. Scooter injuries: a source of significant morbidity in children. The Southwestern Surgical Congress, Nashville, TN, February 2002.
18. Upperman JS, Shultz B, **Gaines B**, Hackam D, Schall L, Ford HR. All-terrain vehicle rules and regulations impact on pediatric mortality. American Pediatric Surgical Association, Phoenix, AZ, May 2002.
19. Hackam DJ, Reblock KK, Redlinger RM, Upperman JS, Wiener ES, **Gaines BA**, Barksdale EM. Delayed presentation of Hirschsprung's disease: Diagnosis, treatment and outcome in older children compared to newborns. British Assoc Ped Surg, XLIX, Congress, Cambridge, UK, July 2002.
20. Hackam DJ, Reblock K, Barksdale EM, Upperman JS, Redlinger R, Lynch J, **Gaines BA**. The influence of down's syndrome on the management and outcome of children with Hirschsprung's disease. Oral presentation, American Academy of Pediatrics National Conference, Boston, MA, October 2002.
21. Nadler EP, Cassidy L, **Gaines BA**, Ford HR. Abused children have higher mortality rates than similarly injured non-abused children. Poster Presentation, American Academy of Pediatrics National Conference, Section of Injury and Poison Prevention, Boston, MA, October 2002.

22. **Gaines BA**, Cassidy L, Shultz B, Ford HR. Impact of helmet utilization in bicycle-related pediatric head injuries. 36<sup>th</sup> Annual meeting of the Association for Academic Surgery, Boston, MA, November 2002.
23. Qureshi FG, Shultz B, **Gaines BA**, Ford HR, Upperman J. Thoracolumbar spine injury in the pediatric population. Pennsylvania Committee on Trauma, Resident Trauma Paper Competition, November 2002.
24. Nadler EP, Baird C, Hackam DJ, Nwomeh BC, Stanford A, Miller KA, Wiener ES, Ford HR, **Gaines BA**. ECMO for the Treatment of a Severe Traumatic Myocardial Contusion in a Six-Year Old Boy. The 19th Annual CNMC Symposium: ECMO and Advanced Therapies For Respiratory Failure, February 2003.
25. Nadler EP, Reblock KK, Ford HR, **Gaines BA**. Monotherapy versus multi-drug therapy for the treatment of perforated appendicitis in children. 23<sup>rd</sup> annual Meeting, Surgical Infection Society, San Antonio, TX, April 2003.
26. Herr S, **Gaines BA**, Shultz BL, Zuckerbraun NS, Vogeley E. Auricular bruising as a marker of severe abusive trauma. Poster presentation, Pediatric Academic Societies' Annual Meeting, Seattle, WA, May 2003.
27. Ahuja S, **Gaines BA**, Ritchey KA. Venous Thromboembolism and the Pediatric Trauma Patient. Poster presentation at the Pediatric Academic Societies' Annual Meeting, Seattle, WA, May 2003.
28. **Gaines BA**, Shultz BL, Morrison K, Ford HR. Duodenal Injuries in Children: Beware of Child Abuse. Poster presentation at the 34<sup>th</sup> Annual Meeting of the American Pediatric Surgical Association, Fort Lauderdale, FL, May 2003.
29. *Zuckerbraun BS, Ford HR, Morrison K, **Gaines BA**, Hackam DJ.* Effect of Age on Cervical Spine Injuries in Children After Motor Vehicle Collisions: Effectiveness of Restraint Devices. Poster presentation at the 34<sup>th</sup> Annual Meeting of the American Pediatric Surgical Association, Fort Lauderdale, FL, May 2003.
30. Nwomeh BC, Nadler EP, Meza MP, Bron K, **Gaines BA**, Ford HR. Contrast extravasation predicts the need for operative intervention in children with blunt splenic trauma. The 62<sup>nd</sup> Annual Meeting for the American Association for the Surgery of Trauma, September 2003.
31. Healy J, Aziz H, Kane T, **Gaines BA**, Green M, Kurland G, Hackam DJ. "VATS early VATS often" A new approach to the management of pediatric empyema. Poster Presentation. Science 2003 Forum, , University of Pittsburgh, Pittsburgh, PA, September 24-26, 2003.
32. **Gaines BA**, Cassidy Schall L, Ford HR. Does Gender Influence Outcome in Pediatric Trauma? Oral-Poster Session at the 37<sup>th</sup> Annual Meeting of the Association for Academic Surgery, Sacramento, November 2003.



33. Nadler EP, Reblock KK, Ford HR, **Gaines BA**. Predictors of outcome for children with perforated appendicitis initially treated non-operatively. The 24<sup>th</sup> meeting of the Surgical Infection Society, Indianapolis, IN, April 2004.
34. **Gaines BA**, Cassidy Schall L, Ford HR. Does pre-existing mental illness affect outcome in pediatric trauma? The 38<sup>th</sup> Annual Meeting of the Association for Academic Surgery, Houston, November 2004.
35. Zuckerbraun NS, Pitetti RD, Herr SM, Roth KR, **Gaines BA**, King C. Use of Etomidate for Rapid Sequence Intubation in a Pediatric Emergency Department. The American Academy of Pediatrics National Conference, San Francisco, CA, October 2004.

## PUBLICATIONS

### Referred Articles:

1. **Gaines BA**, Colson YL, Kaufman CL, Ildstad ST. Mice transplanted with allogeneic fetal liver stem cells and adult facilitating cells demonstrate multilineage chimerism. Surg Forum XLVI:444-7, 1995.
2. Kaufman CL, **Gaines BA**, Ildstad ST. Xenotransplantation. Annu Rev Immunol, Review 13:339-67, 1995.
3. **Gaines BA**, Colson YL, Kaufman CI, Ildstad ST. Facilitating cells enable engraftment of purified fetal liver stem cells in allogeneic recipients. Exp Hematol, 24:902-913, 1996.
4. Lynch JM, Gardner MJ, **Gaines B**. Hemodynamic significance of pediatric femur fractures. J Pediatr Surg, 31:1358-1361, 1996.
5. Colson YL, Abou El Ezz AY, **Gaines BA**, Ildstad ST. Positive and negative selection of  $\alpha$ -TCR<sup>+</sup> T-cells in thymectomized adult radiation bone marrow chimeras. Transplantation 68:403-410, 1999.
6. Upperman JS, Gardner M, **Gaines B**, Schall L, Ford HR. Early functional outcome in children with pelvic fractures. J Pediatr Surg 35:1002-1005, 2000.
7. **Gaines BA**, Ford HR. Abdominal and pelvic trauma in children. Crit Care Med 30 (11):S416-423, 2002.
8. Upperman JS, **Gaines B**, Hackam DJ. H-type congenital tracheoesophageal fistula. Am J Surgery, 185:599-600, 2003.
9. Hackam DJ, Reblock K, Barksdale EM, Redlinger R, Lynch J, **Gaines BA**. The influence of Down's syndrome on the management and outcome of children with Hirschsprung's disease. J Pediatr Surg, 38:946-949, 2003.
10. Upperman JS, Shultz B, **Gaines BA**, Hackam D, Cassidy LD, Ford HR, Helmke J. All-terrain vehicle rules and regulations: Impact on pediatric mortality. J Pediatr Surg, 38(9):1284-1286, 2003.
11. Nadler EP, Reblock K, Ford HR, **Gaines BA**. Monotherapy versus Multi-Drug Therapy for the Treatment of Perforated Appendicitis in Children. Surg Infect 4(4):327, 2003.

12. Zuckerbraun BS, Morrison K, **Gaines BA**, Ford HR, Hackam DJ. Effect of Age on Cervical Spine Injuries in Children After Motor Vehicle Collisions: Effectiveness of Restraint Devices. *J Ped Surgery* 39(3);483-483, 2004.
13. Nwomeh BC, Nadler EP, Meza MP, Brown K, **Gaines BA**, Ford HR. Contrast Extravasation Predicts the Need for Operative Intervention in Children with Blunt Splenic Trauma. *J Trauma* 56(3);537-541, 2004
14. **Gaines BA**, Shultz BL, Ford HR. Non-motorized scooters: A source of significant morbidity in children. *J Trauma* 57 :111-113, 2004.
15. **Gaines BA**, Shultz BL, Morrison K, Ford HR. Duodenal injuries in children: Beware of child abuse. *J Ped Surg* 39(4); 600-602, 2004
16. Rozmiarek AJ, Qureshi FG, Cassidy L, Ford HR, **Gaines BA**, Rycus P, Hackam DJ. How low can you go? Effectiveness and safety of extracorporeal membrane oxygenation in low-birth-weight neonates. *J Ped Surg* 39(5); 845-847, 2004.
17. Nadler EP, Reblock K, Vaughan KG, Meza MP, Ford HR, **Gaines BA**. Predictors of outcome for children with perforated appendicitis initially treated with non-operative management. *Surg Infect*, 5(4):349-356, 2004.
18. Nadler EP, Potoka DA, Shultz BL, Morrison KE, Ford HR, **Gaines BA**. The high morbidity associated with handlebar injuries in children. *J Trauma*, 58(6); 1171-1174, 2005.
18. **Gaines, BA**. Pediatric Trauma Care: An Ongoing Evolution. *Clinical Pediatric Emergency Medicine*, 6(1):4-7, March 2005.
19. Ford HR, Jones P, **Gaines BA**, Reblock K, Simpkins DL. Intraoperative Handling and Wound Healing: Controlled Clinical Trial Comparing Coated VICRYL Plus Antibacterial Suture (Coated Polyglactin 910 Suture with Tricolsan) with Coated VICRYL Suture (Coated Polyglactin 910 Suture). *Surg Infect*, 6(3):313-321, November 2005.
20. Shaw PH, Ranganathan S, **Gaines BA**. A Spontaneous Intramural Hematoma of the Bowel Presenting as obstruction in a Child Receiving Low-Molecular-Weight Heparin. *J Pediatr Hematol Oncol*, 27(10): 558-560, October 2005.
21. Feliz A, Shultz B, McKenna C, **Gaines BA**. Diagnostic and therapeutic laparoscopy in pediatric abdominal trauma. *J Pediatric Surg*, 41(1):72-77, Jan 2006.
22. Leapheart CL, Danko M, Cassidy L, **Gaines BA**, Hackam DJ. An Analysis of Proctoscopy vs. CT Scanning in the Diagnosis of Rectal Injuries in Children: Which is Better? *J of Pediatric Surgery*, 41(4): 700-3, Apr 2006.

23. Zuckerbraun NS, Pitetti RD, Herr SM, Roth KR, **Gaines BA**, King C. Use of etomidate as an induction agent for rapid sequence intubation in a pediatric emergency department. Acad Emerg Med, 13(6):602-9, June 2006. Epub 2006 Apr 24.
24. Nadler EP, Reblock KK, Qureshi FG, Hackam DJ, **Gaines BA**, Kane TD. Laparoscopic appendectomy in children with perforated appendicitis. J Laparoendosc Adv Surg Tech A 16(2):159-63, April 2006.

**Reviewed, invited published papers, proceedings of conference and symposia, monographs, books and book chapters:**

1. **Gaines BA**, Ildstad ST. Mixed chimerism and Gaucher Disease. Gaucher Clinical Perspectives, 3:5-12, 1995.
2. **Gaines BA**, Ildstad ST. Xenoreactivity, chimerism, and tolerance. In: Chimerism and Tolerance. Suzanne T. Ildstad (editor), RG Landes Company, Medical Publishers, Austin/Berlin, 1995, pg.171-188.
3. **Gaines BA**, Bou El Ezz AY, Ildstad ST. Evidence of de novo development of CD8<sup>+</sup> -TCR T-cells in the absence of the thymus. In: Transplantation Tolerance Induction, JW Alexander and RA Good (Editors), RG Landes Company, Medical Publishers, Austin/Berlin, 159-63, 1996.
4. Kostecke RA, **Gaines BA**, Ildstad ST. Immunology. In: The Surgery of Infants and Children: Scientific Principles and Practice. Keith T. Oldham, Robert P. Flogia, and Paul M. Colombani (editors). JB Lippincott Company, Philadelphia, PA, 1998.
5. **Gaines BA**, Holcomb GW III, Neblet W III. Omphalocele and Gastroschisis. In: Pediatric Surgery, Third Edition. Keith W. Ashcraft (editor). W.B. Saunders Company, Orlando, FL, 2000.
6. **Gaines BA**, Scheidler MG, Lynch JM, Ford HR. Pediatric Injury. In: The Trauma Manual, Third Edition. In press.

**Seminars and Invited Lectureships:**

1. Allogeneic engraftment capability (or lack) of fetal liver stem cells. Presented at General Surgery Research Conference, University of Pittsburgh, Pittsburgh, PA, April 1995.
2. Abdominal wall defects. General Surgery Grand Rounds, University of Pittsburgh, December 1998.
3. Asymptomatic malrotation: Operation is indicated. Presented at the 20<sup>th</sup> Annual Pediatric Surgery Resident Conference, Washington, DC, October 1999.
4. Congenital diaphragmatic hernia, an Update. Presented at the 46<sup>th</sup> Annual Meeting of Southwestern Pennsylvania chapter of the American College of Surgeons, Pittsburgh, PA, March 2000.
5. Hirschsprung's Disease. Featured presentation at General Surgery Grand Rounds, University of Pittsburgh, April 2000.

6. "Guns and Children" for the University of Pittsburgh School of Medicine Chapter of Physicians for Social Responsibility, November 30, 2000.
7. "An introduction to pediatric trauma" at Operating Room Educational In-Service, Mercy Hospital, Pittsburgh, PA, February 21, 2001.
8. Trauma Lecture Series, "Pediatric Trauma Update". Presented at Bay Health Medical Center, Dover, DE, April 2001.
9. "ABCs at CHP", Trauma Nurse Course. Children's Hospital of Pittsburgh, PA, April 30, 2001.
10. "Necrotizing Enterocolitis". Children's Hospital of Pittsburgh, PA, September 6<sup>th</sup>, 2001.
11. "Adolescent Trauma". Children's Hospital of Pittsburgh, PA, September 6<sup>th</sup>, 2001.
12. Pediatric Trauma – "Contemporary Management of Pediatric Trauma". Altoona, PA, October 25, 2001.
13. Western Maryland Trauma Seminar – Pediatric Trauma - "Contemporary Management of Pediatric Trauma". Deep Creek, Maryland, November 2001.
14. Non-accidental Trauma in Children – An Overview of a Major Mechanism of Injury in Children. EMSI Conference, March 21, 2002.
15. "Pediatric Abdominal Trauma: Initial Evaluation, Resuscitation and Treatment". EMSI Conference, March 21, 2002.
16. "Violence and Youth", GREAT Camp, Penn Hills, PA, June 18, 2002.
17. STAT MedEvac Education Teleconferences, University of Pittsburgh School of Medicine, September 4 and September 18, 2002.
18. Review of pediatric trauma and case analysis. Richland EMS, September 2002.
19. "The Golden Hour", Trauma Nurse Course, Children's Hospital of Pittsburgh, biannually, May and September 2002, 2003, 2005.
20. "Pediatric Trauma", EMS lecture, Ohio Valley Hospital, Wintersville, OH, May 20, 2003.
21. "Violence and Youth", GREAT Camp, Penn Hills, PA, June 17, 2003.
22. "Trauma Program Overview," Pediatric Resident's Noon Conference, July 1, 2003.
23. "ER Management of a Trauma Patient," PICU fellows Noon Conference, July 22, 2003.
24. "Perils of Pediatrics," Hamot Shock Trauma Center Annual Conference, Erie, PA, September 26, 2003.

25. "Trauma Video Review," ED fellows Weekly Conference, October 1, 2003.
26. Core Lecture: "Congenital diaphragmatic hernia" CHP Pediatric Surgery Weekly Conference, October 16, 2003.
27. Panel Discussion: Education Workshop, Session 2. 37<sup>th</sup> Annual Meeting of the Association for Academic Surgery, San Francisco, CA, November 2003.
28. *"Pain assessment" and "Hypovolemic shock and a review of causes."* UPMC Horizon Hospital, January 23, 2004.
29. "Trauma," Moderator: Poster Grand Rounds, Annual Scientific Meeting of Southeastern Surgical Congress, Atlanta, GA, January 31, 2004.
30. "MVC Case Review" Uniontown Hospital Grand Rounds, February 4, 2004.
31. "Abdominal Trauma" 4<sup>th</sup> Annual John M. Templeton Pediatric Trauma Symposium, Philadelphia, March 12, 2004.
32. "Pediatric Trauma." EMSI Update 2004, Seven Springs Resort, PA, March 26, 2004.
33. "Pediatric Trauma: Rural Perspective." Third Annual Trauma Symposium: Agricultural and Rural Trauma, Prevention and Management in the 21<sup>st</sup> Century, Allegheny General Hospital, Pittsburgh, PA, May 14, 2004.
34. "Pediatric Trauma." Herman Volunteer Fire Company, Butler, PA, May 18, 2004.
35. "The Golden Hour", Trauma Nurse Course, Children's Hospital of Pittsburgh, biannually, May and September 2002, 2003, 2004
36. "Fluid Resuscitation in Trauma." PCCM Fellows' lecture, Children's Hospital of Pittsburgh, June 1, 2004.
37. "ECMO in Pediatric Trauma Patients." International Conference on Pediatric Trauma, Kiwanis Pediatric Trauma Institute, New England Medical Center, Boston, MA, June 7, 2004.
38. Invited Discussant, Pediatric Surgery, Surgical Forum, American College of Surgeons, 90<sup>th</sup> Annual Clinical Congress, New Orleans, LA, October 11, 2004.
39. Judge, Resident Paper Competition, Pennsylvania Committee on Trauma, October 29, 2004.
40. "Pediatric Trauma," Jamieson Hospital, New Castle, PA, November 23, 2004
41. "Pediatric Trauma for the Adult Trauma Surgeon," Breakfast Session, EAST, 18<sup>th</sup> Annual Scientific Assembly, January 15, 2005.

42. "Challenging Pediatric Cases" Children's Hospital of Pittsburgh. Presented by Barbara A. Gaines, MD, and Christine McKenna, CRNP, 5<sup>th</sup> Annual John M. Templeton Pediatric Trauma Symposium, Pittsburgh, PA, March 4, 2005.
43. "Contemporary Management of Pediatric Blunt Abdominal Trauma" Presented at 5<sup>th</sup> Annual John M. Templeton Pediatric Trauma Symposium, Pittsburgh, PA, March 5, 2005.
44. "ABCs of Summer Trauma." Presented at Timely Trauma Topics, Children's Hospital of Pittsburgh, April 25, 2005.
45. "Blood transfusions are associated with increased risk of sepsis in severely burned pediatric patients." Invited Discussant, Surgical Infection Society joint meeting with SIS-East, May 6, 2005.
46. "When It Comes to Operation: Key Elements of Pediatric Trauma." Special Problems Session, American College of Surgeons, 91<sup>st</sup> Annual Clinical Congress, San Francisco, CA, October 18, 2005.
47. "Challenging Cases in Pediatric Trauma." Children's Hospital of Pittsburgh. Presented by Barbara A. Gaines, MD, and Christine McKenna, CRNP, 6<sup>th</sup> Annual John M. Templeton Pediatric Trauma Symposium, Pittsburgh, PA, March 3, 2006.
48. "Treatment of DVT: At What Age?" Presented at 6<sup>th</sup> Annual John M. Templeton Pediatric Trauma Symposium, Pittsburgh, PA, March 3, 2006.
49. "Extremes of Life: Pediatric Trauma." Presented at Allegheny General Hospital Shock Trauma Center's Fourth Annual Trauma Symposium, Pittsburgh, PA, May 1, 2006.

## Teaching

1. Gastrointestinal bleeding in children. Presented at Pediatric Surgery teaching conference, January 19, 1999.
2. Neonatal chronic lung disease. Presented at Pediatric Surgery teaching conference, March 2, 1999.
3. Nutritional support and short bowel syndrome. Presented at Pediatric Surgery teaching conference, March 23, 1999.
4. Pyloric stenosis. Presented at Pediatric Surgery teaching conference, June 1, 1999.
5. Pediatric Anatomy Lab, Camp STAT, July 2000.
6. Neonatal bowel obstruction. Pediatric Surgery teaching conference, August 2000.
7. Surgical Skills Practicum. ATLS class (instructing). University of Pittsburgh School of Medicine, June 13, 2002.
8. Pediatric Trauma. ATLS class (instructing). University of Pittsburgh School of Medicine, June 14, 2002.

9. "Management of Trauma Patient", PICU Fellows Lecture, Children's Hospital of Pittsburgh, July 2002.
10. Human body course (Pelvis case). Problem-based Learning, University of Pittsburgh School of Medicine, September 13, 2002.
11. Human body course (Head/Neck case). Problem-based Learning, University of Pittsburgh School of Medicine, September 20 and 25, 2002.
12. Abdominal Trauma", ER Fellows Course, Children's Hospital of Pittsburgh, October 2, 2002.
13. Surgical Skills Practicum. ATLS class (instructing). University of Pittsburgh School of Medicine, July 17, 2003.
14. Pediatric Trauma. ATLS class (instructing). University of Pittsburgh School of Medicine, July 18, 2003.
15. "Introduction to Surgical Techniques." Clinical Procedures Course, University of Pittsburgh School of Medicine, May 11, 2004.
16. Trauma Resuscitation Video Review, Children's Hospital of Pittsburgh, monthly.
17. Human body course (Thorax case). Problem-based Learning, University of Pittsburgh School of Medicine, August 30 and September 5, 2004.
18. Suture Technique, Surgery Clerkship, University of Pittsburgh School of Medicine, January 5, 2005.

#### **MEDIA EVENTS**

1. Bus accident with child (family and Dr. Gaines). Media: KDKA-TV, WPXI-TV, WTAE-TV, FOX, Tribune-Review, Pittsburgh Post-Gazette, KDKA Radio, KQV. February 26, 2002.
2. Sports injuries in kids. Media: WPXI-TV. May 22, 2002
3. Car seat safety and seat belts for kids. Media: FOX. March 23, 2002
4. Summer Injuries. Media: Woman's Day Magazine. March 23, 2002
5. Fireworks safety and former patient injured by fireworks. Media: Tribune-Review. June 25, 2002
6. Summer injuries/traumas. Media: Post-Gazette. June 26, 2003.
7. Skating injuries. Media: WTAE-TV. August 12, 2002.
8. Car surfing. Media: KDKA Radio. August 28, 2002.
9. Gun shot wounds and kids. Media: WTAE-TV. December 5, 2002.
10. KDKA/Children's Hospital Radiothon. Media: KDKA Radio. December 12, 2002.
11. Home Safety. Media: Tribune-Review. December 19, 2002.
12. RE: patient Paul Bryer. Media: Tribune-Review. December 19, 2002.
13. Frostbite and cold weather – kids. Media: WTAE-TV. January 22, 2003.
14. Kids and exercise equipment. Media: WTAE-TV. January 29, 2003.
15. Winter injuries. Media: Y108-FM, B94 FM, Star 100.7 FM. February 4, 2003.
16. Child passenger safety. Media: Pittsburgh Tribune-Review. February 26, 2003.
17. Dangers of wrestling. Media: WTAE-TV. May 28, 2003.



18. Power windows as choking hazard. Media: WTAE-TV. May 28, 2003.
19. Circumcision. Media: WTAE-TV. May 21, 2003.
20. Summer traumas. Media: KDKA Radio. June 12, 2003.
21. Fireworks safety. Media: KQV Radio. July 4, 2003.
22. Physicians for social responsibility, assault weapons ban. Media: TV, radio. April 17, 2004.
23. Bike Safety. Media: WTAE, WPXI, WPGH TV. May 18, 2004.
24. Summer Traumas. Media: PCNC-TV, "NightTalk w/Ann Devlin." June 24, 2004.
25. Seat-belt injuries. Media: CBS, "The Early Show" September 2004.
26. Back to school. Media: PCNC-TV, "NightTalk w/Ann Devlin." September 9, 2004.
27. Assault weapons (press conference). Media: TV, radio, newspaper, September 7, 2004.
28. Wintertime injuries. Media: KDKA radio, November 28, 2004.
29. ATV injuries. Media: TV, November 29, 2004.
30. Dangerous Toys. Media: PCNC-TV, "NightTalk w/Ann Devlin," December 1, 2004 .
31. Wintertime injuries. Media: KDKA TV, "Jennifer Antkowiak Show," December 17, 2004.
32. Protecting kids when the weather is cold. Media: KDKA radio, December 20, 2004.
33. Cold Weather Injury Prevention. Media: WPXI, Fox53, WDUQ radio, KQV radio, Jan. 17, 2005
34. ATV safety - interview with Herald-Standard newspaper, Jan. 17, 2005.
35. Sledding safety - interview with KDKA, March 1, 2005
36. Car Seat Safety. Media: KDKA, Fox53, WPXI, WDUQ, KQV, April 16, 2005.
37. Care Seat Safety (restraining child in appropriate seat for size and age). Media: KDKA, WTAE, WPXI, Pittsburgh Tribune-Review, April 26, 2005.
38. Dangers of parents co-sleeping with kids. Media: Fox53, WTAE, WPXI, Pittsburgh Tribune-Review, May 9, 2005.
39. ABCs of summer trauma season. New York Times, May 9, 2005.
40. Drowning dangers around the home. Media: WTAE, May 19, 2005.
41. Fireworks safety. Media: WPXI, July 1, 2005.
42. Dangers of lightning strikes. Media: Fox53, July 18, 2005.
43. Dangers of lightning strikes. Media: KDKA, Pittsburgh Today Live with Jennifer Antkowiak, July 19, 2005.
44. Halloween Safety. Media: WPXI, October 31, 2005.
45. Trauma and Injury Prevention. Media: KDKA radio, December 12, 2005.
46. Cheerleading injuries. Pittsburgh Tribune-Review, January 9, 2006.
47. Dog Bites. Media: WTAE, February 26, 2006.
48. The Choking Game. Media: Christian Broadcast Network, February 22, 2006.
49. RED Program; Reality Education for Drivers. Media: Pittsburgh Tribune-Review, April 1, 2006.
50. Trauma Story. Media: Pittsburgh Tribune-Review, April 21, 2006
51. Hard Head Patrol. Media: KDKA, WTAE, WPXI, Butler Eagle, KQV, May 3, 2006.
52. Hard Head Patrol. Media: Pittsburgh Today Live, KDKA, May 9, 2006.
53. Pool Safety. Media: WTAE. May 30, 2006.
54. Hard Head Patrol. Media: PCNC-TV, "NightTalk w/Ann Devlin," June 21, 2006 .
55. Swimming Safety. Media: Post Gazette, June 22, 2006.
56. Swimming Safety. Media: KDKA, June 27, 2006.



## Press Releases

1. National Child Passenger Safety Week Awareness. Feb. 8, 2002
2. Car Seat Checkpoints and Car Seat Safety. April 9, 2002
3. Firework Safety. June 28, 2002
4. Dog Bite – Safety and Prevention (web site). July 3, 2002
5. Summer Traumas. June 11, 2003
6. Fireworks Safety. July 1, 2003
7. Trauma Center Accreditation, October 4, 2004.
8. Halloween Safety, October 21, 2004.

## RESEARCH

- 2006- A Prospective, Randomized, Controlled Evaluation of Fibrin Sealant 2 (FS2) as an Adjunct to Hemostasis for Soft Tissue Bleeding During Retroperitoneal or Intra-Abdominal Surgery  
Source: Ethicon, Inc.; Protocol 400-05-006  
PI: Barbara Gaines, MD
- 2003 – 2004 Open-Label, Controlled, Comparative, Randomized, Prospective Clinical Study of Coated VICRYL\* PLUS ANTIBACTERIAL (Polyglactin 910) Suture vs Coated VICRYL\* (Polyglactin 910) Suture to Assess Intra-Operative Handling, and Wound Healing Characteristics Over Full Absorption Time in General Surgery Procedures in the Pediatric Population  
Source: Ethicon, Inc.; Protocol 2003-002  
Role: Co-investigator,  
PI: Henri R. Ford, M.D. Amount: \$226,200
- 09/02 – 08/04 National Pediatric Trauma Registry Grant, Registry Design Priority Area  
NTRC, 1H72-MC-0000401  
Source: Health Resources Services Administration/Maternal Child Health Bureau (HRSA/MCHB) Emergency Medical Services for Children Program (EMSC).  
Role: Medical Co-investigator, 5%  
PI: Laura Cassidy Schall, PhD. Amount: \$487,532
- 12/01 – 11/06 Injury Free Coalition for Kids Program Site  
Source: The Robert Wood Johnson Foundation  
Role: Principle Investigator  
Amount: \$266,100

## Mini-Grants

- 06/03-05/04 Injury Prevention Video  
Source: American Trauma Society – Pennsylvania Division  
Role: Principal investigator Amount: \$1,500
- 06/03-05/04 Adolescent Traffic Offenders Program: This is RED Driving Program (Reality Education for Drivers)  
Source: American Trauma Society – Pennsylvania Division

Role: Principal investigator Amount: \$648.00

**Current Research Interests**

1. Neonatal surgical critical care
2. Outcomes related research involving pediatric surgical critical care, trauma, and injury prevention